

## ABSTRACT

A system for data transmission over an optical network, the system including a service collection unit including a collection module for collecting a plurality of services data to be transmitted, a processing module for processing the services in their original protocols into packets, and a packet transmission module for converting the services into optical signals on an optical fiber for transmission onto an access network; and an aggregator coupled for optical communication to the service collection unit and including a sorting module for sorting the services from a plurality of packets according to service type, and an aggregator module for combining like services for transmission over a compatible transport network.